

Amendments to the Drawings:

The attached replacement sheet of drawings includes changes to Fig. 1 and replaces the original sheet including Figs. 1 and 2.

In Figure 1, please add (prior art) under the figure.

Attachments following last page of this Amendment:

Replacement Sheet (1 page)

REMARKS

Claims 1-46 are pending, with claims 1, 14, 21 and 34 being independent. Claims 11, 16, 31 and 44 have been cancelled by this amendment without prejudice. Claims 1-6, 8-10, 13-15, 21-26, 28-30, 32-34, 37, 39, 41-43 and 46 have been amended. No new matter has been added. Reconsideration and allowance of the above-referenced application are respectfully requested.

Claim Objections & Allowable Subject Matter:

Claims 13, 33 and 46 stand objected to as being dependent upon a rejected base claim, but are indicated as allowable if rewritten in independent form. Claims 13, 33 and 46 have been rewritten in independent form and are thus in condition for allowance.

Claim 16 stands objected to for informalities. Applicant does not agree that there is a proper basis for this objection, but nonetheless this objection has been obviated by the cancellation of claim 16 without prejudice.

Claim Rejections:

Claims 6, 8 and 28 stand rejected under 35 U.S.C. § 112, second paragraph. This rejection has been obviated by the present amendment.

Claims 1-12, 14-32 and 34-45 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Yang (U.S. Pat. No. 6,563,382). This contention is respectfully traversed.

Examiner Nguyen is thanked for the telephone interview, which was conducted with Applicants' representative, Mr. Hunter, on January 10, 2005. During the interview, claims 1, 14, 21 and 34, and the Yang reference were discussed. Agreement was reached that the proposed amendment to the independent claims would overcome the current rejection of these claims, and thus may place them in condition for allowance, subject to further consideration and search.

Independent claims 1, 14, 21 and 34 have been amended, as proposed, to specify that there are a plurality of switches in parallel with the resistive element in the voltage buffer. As agreed, this amendment overcomes the current rejection. Thus, claims 1, 14, 21 and 34 should now be in condition for allowance. Dependent claims 2, 3, 5-10, 12, 17-20, 22, 23, 25-30, 32, 35, 36, 38-43 and 45 are patentable for at least the above reasons and based on their own merits.

Additionally, the differences between the Yang reference and the subject matter of claims 4, 15, 24 and 37 were briefly discussed during the interview. In particular, Applicants' representative noted that the circuit of Yang is different from the subject matter of claims 4, 15, 24 and 37 because the transistors M1 and M2 in Yang are provided to prevent Q1 and Q2 from being driven into saturation; M1 and M2 provide additional bias currents IM1 and IM2. Thus, in the circuit of Yang, the gain is not proportional to the equivalent resistance at the output node, as claimed, but rather is proportional to the bias current to Q3. While Examiner Nguyen generally agreed with this point, no agreement was reached with respect to these claims during the interview.

Claims 4, 15, 24 and 37 have been rewritten in independent form and some additional language has been added to more clearly distinguish over the art of record. Claim 4 now recites, "wherein the switch is operable to change a gain at the output node, the switch being used as a variable resistance to adjust an effective resistance value at the output node, and the gain is proportional to an equivalent resistance at the output node." Claim 15 now recites, "changing a gain of the buffer by at least a programmable gain step by changing an equivalent resistance at an output point in the voltage buffer using the one or more

selected switches as a variable resistance to adjust an effective resistance value at the output point." Claim 24 now recites, "wherein the switch is operable to change a gain at the output node, the switch being used as a variable resistance to adjust an effective resistance value at the output node, and the gain is proportional to an equivalent resistance at the output node." Claim 37 now recites, "wherein the switching means includes means for changing a gain at the output node, the switching means being used as a variable resistance to adjust an effective resistance value at the output node, and the gain is proportional to an equivalent resistance at the output node." Thus, claims 4, 15, 24 and 37 should now be in condition for allowance.

It is respectfully suggested for all of these reasons, that the current rejection is totally overcome; that none of the cited art teaches or suggests the features which are now claimed, and therefore that all of these claims should be in condition for allowance. A formal notice of allowance is thus respectfully requested.

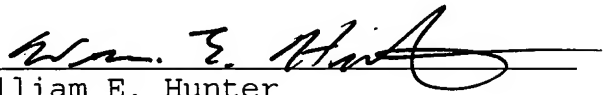
It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific issue or comment does not signify agreement with or concession of that issue or comment. Because the arguments made above may not be

exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Enclosed is a Credit Card payment of \$1400 for excess claim fees. Please apply any other necessary charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: Jan. 19, 2005


William E. Hunter
Reg. No. 47,671

Fish & Richardson P.C.
Customer Number: 26200
12390 El Camino Real
San Diego, California 92130
Telephone: (858) 678-5070
Facsimile: (858) 678-5099

10461153.doc